



*DC Health Benefit  
Exchange Authority*

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# DC EXCHANGE CARRIER INTEGRATION MANUAL

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## Revision History

Date	Version	Changes	Author
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## 1.0 Purpose

The purpose of this document is to provide Carriers with a comprehensive guide to the services offered by the District of Columbia Health Benefit Exchange (DC HBX, referred to as DC Exchange) that allow them to fully participate in Exchange. This document provides detailed information for Carriers to help them leverage the functionality offered by the implementation of DC Exchange, specifically in the area of electronic data exchanges. It describes the supported business models, operational and technical integration requirements, testing processes, and certification requirements for Carriers.

### 1.1 Background

On March 23, 2010, the Patient Protection and Affordable Care Act was signed into law. A key provision of the law requires all states to participate in an American Health Benefit Exchange beginning January 1, 2014. The District of Columbia declared its intention to establish a state based health benefit exchange in 2011 with the introduction and enactment of the Health Benefit Exchange Authority Establishment Act of 2011, effective March 3, 2012 (D.C. Law 19- 0094).

The Health Benefit Exchange Authority Establishment Act of 2011 establishes the following core responsibilities for the Exchange:

- 1) Enable individuals and small employers to find affordable and easier-to understand health insurance;
- 2) Facilitate the purchase and sale of qualified health plans;
- 3) Assist small employers in facilitating the enrollment of their employees in qualified health plans;
- 4) Reduce the number of uninsured;
- 5) Provide a transparent marketplace for health benefit plans;
- 6) Educate consumers; and
- 7) Assist individuals and groups to access programs, premium assistance tax credits, and cost-sharing reductions.

The DC Exchange is responsible for the development and operation of all core Exchange functions including the following:

- Certification of Qualified Health Plans and Qualified Dental Plans
- Operation of a Small Business Health Options Program
- Consumer support for coverage decisions
- Eligibility determinations for individuals and families
- Enrollment in Qualified Health Plans
- Contracting with certified carriers
- Determination for exemptions from the individual mandate

## 2.0 Key Terms

This section describes the key terms and definitions that are used throughout this document.

The following terms and their definitions apply to both the business process workflows as well as the system requirements:

**APTC** is Advance Premium Tax Credit

**Business Requirement (BR)** is a specific business element or task which is required by the District of Columbia, business users, or by legislation, regulation or guidance.

**Carrier** refers broadly to any entity licensed to engage in the business of insurance in District of Columbia and subject to State laws regulating insurance. These entities include insurers, health maintenance organizations, non-profit health service plans, dental plan organizations, stand-alone vision carriers, and consumer operated and oriented plans.

**CCIO** is the Center for Medicare & Medicaid Services' Center for Consumer Information and Insurance Oversight.

**CMS** is the Center for Medicare & Medicaid Services.

**CSR** is Cost-Sharing Reduction.

**Customer** is an individual using DC Exchange to directly acquire health insurance.

**DC Health Benefit Exchange (DC Exchange or DC HBX)** is the District-based health insurance marketplace.

**DISB** is the District of Columbia Department of Insurance, Securities and Banking.

**Health plans** are Qualified Health Plans (QHPs), Medicaid managed care plans, and, if applicable in the District of Columbia, separate pediatric dental plans, or vision plans that offer essential health benefits to children as free-standing plans or in conjunction with a QHP.

**Metal Levels** are platinum, gold, silver, and bronze, representing available QHPs in descending actuarial value.

**No Wrong Door** is the provision in the Affordable Care Act requiring states to ensure that a customer who approaches the state for health assistance programs is correctly directed to the program for which they are eligible including individual affordability programs such as Medicaid or qualified health plans (QHPs)

**Qualified Employee / SHOP Employee** is an employee of a qualified employer who has been offered coverage through the SHOP Exchange.

**Qualified Employer / SHOP Employer** is an employer with 50 or fewer employees, with a business address in the District of Columbia, which offers QHP(s) to at least all full-time employees working an average of at least 30 hours per week.

**Qualified Health Plans (QHPs)** are the certified health insurance plans offered to consumers and small businesses purchasing coverage through the DC Exchange.

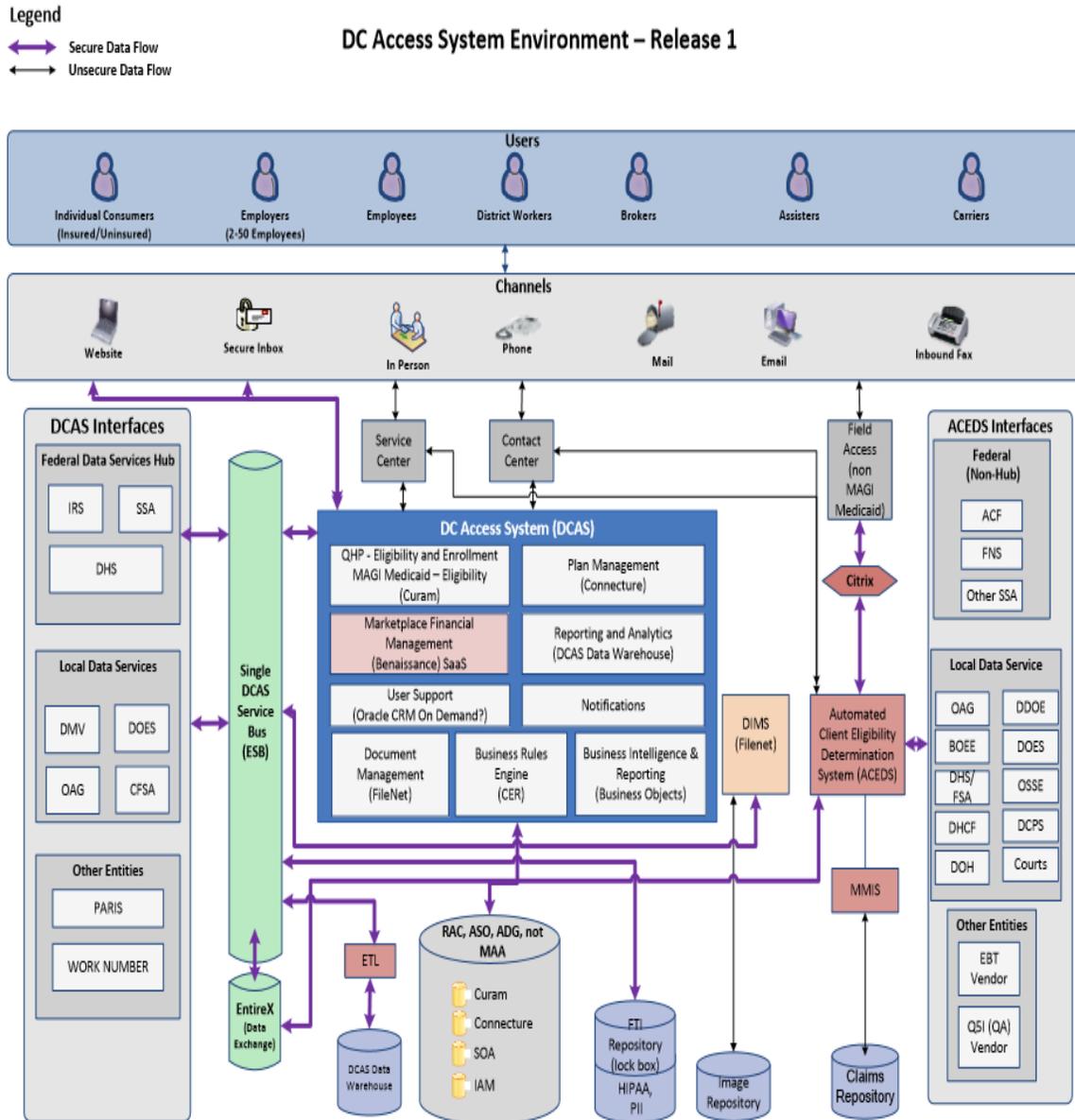
**Reference plan** is a benchmark plan chosen by an employer for purposes of calculating employer contributions. The employee cost to enroll in the reference plan is the same for each coverage tier for every employee regardless of his/her age. If an employee chooses to enroll in a plan other than the reference plan, the employee cost is the cost to enroll in the reference plan plus the difference between the member-level age-rated lists billed premium for the reference plan and the plan in which the individuals enroll.

**SHOP / Small Business Health Options Program** is the component of the DC Exchange designed to allow small businesses to shop for QHPs for their employees.

**System** is the technology put in place to support DC Exchange.

### 3.0 DC Exchange Overview

Figure 3-1 provides a high-level architectural view of how the various entities or constituents interact with the DC Exchange. The users on the top part of the diagram access the DC Exchange functionality through various means as described in the diagram



Carriers will access DC Exchange through web and secure inbox.

## 4.0 FUNCTIONAL OVERVIEW OF INTEGRATION SCENARIOS

### 4.1 PLAN MANAGEMENT

Plan management involves updating the DC Exchange with the Qualified Health Plan (QHP) information to be shown during the shopping experience on the DC Exchange. Carriers must first have their QHPs approved by the Department of Insurance, Securities and Banking (DISB). Once approved, the Carrier is responsible for providing the plan information to the DC Exchange.

### 4.2 ENROLLMENT

Enrollment information for the purposes of this guide refers to both subscriber and dependent enrollment. DC Exchange allows for enrolling dependents as well as subscribers.

The enrollment data is used to:

- Add a new employee or individual
- Update an existing employee or individual
- Terminate an existing employee or individual
- Add a new dependent
- Update an existing dependent
- Terminate an existing dependent

The DC Exchange is the enrollment system of record and the 834 is sent from the DC Exchange to the Carrier on a predetermined schedule to update the Carrier with enrollment data. The Carrier will load the data and send back to the DC Exchange an acknowledgement file which is used to confirm that the Carrier has successfully updated their system, and also to provide back to the DC Exchange any Issuer Assigned ID's. Issuer Assigned IDs that the DC Exchange will provide in the 834 companion guide

### 4.3 DISENROLLMENT

Disenrollment is the termination or cancelation of QHP coverage for an individual, employee or employer group. Disenrollment causes coverage to end, and billing to the entity to end as well. The source of the termination can be either the DC Exchange or the Carrier. When the DC Exchange is collecting payments from the insured entity (as will be the case for all employer payments and the first payment only for individual enrollees), the DC Exchange will originate the disenrollment, and send the information to the Carrier. When the Carrier is collecting payments from the insured, as will typically be the case for individuals on the DC Exchange, the Carrier will originate the disenrollment and communicate it to the DC Exchange. The communication from the disenrollment form either party will be by the same means as the enrollment data was originally communicated.

### 4.4 PAYMENTS

In general, payments can be received by either the DC Exchange or the Carrier. When a payment is received, the payment information must be sent from the entity receiving the payment to the other entity.

Payment information is sent in the HIPAA 820 format. This format is designed specifically for Health Insurance Exchange Payments. The DC Exchange will remit the dollars via ACH file to the Carrier, and to communicate the remittance information, the 820 file is sent from the DC Exchange to the Carrier.

The Advance Premium Tax Credit (APTC) payments will be sent directly to the Carriers from the Federal Government (i.e. the APTC will not be sent to the DC Exchange). The Carrier will be required to send an 820 file to the DC Exchange to report that the payment was made, so that the DC Exchange can update the billing records.

For the Individual Exchange, DC Exchange collects only the first payment to a carrier from the consumer, unless the consumer chooses to be billed by the Carrier for the first payment. These payments, along with any APTC or Cost Sharing Reduction (CSR) payments must be reported to the DC Exchange through the 820 file as well.

There are fields within both the ACH and the 820 file that link the actual payment to the remittance data. It is important that the 820 file be created and sent to the other party on the same day that the payment is made.

## 4.5 RECONCILIATION

### 4.5.1 Enrollment Reconciliation

In the initial stages of the DC Exchange operation, reconciliation will take place on a weekly basis. The intention is to identify anomalies and exceptions scenarios as early as possible, in an effort to respond quickly and minimize the impact of issues.

After any critical issues in the enrollment process have been addressed, the frequency of reconciliation will shift to a monthly basis.

The DC Exchange will send a Carrier a standard 834 “audit or compare” file with a Maintenance Type Code of “030,” which will contain all enrollment data for the active enrollments present on that day.

Carriers are required to independently devise a suitable methodology to identify discrepancies between their records and the reconciliation file provided by the DC Exchange. The DC Exchange will apply its own processes for comparing a Carrier’s audit file against records in the Exchange.

Any issues identified by Carriers will be reported to the DC Exchange. Likewise, the DC Exchange will report any issues to Carriers.

DC Exchange will work to setup a standard operating procedure to address resolution of issues through the reconciliation process.

### 4.5.2 Payment Reconciliation

In the initial stages of the DC Exchange operation, reconciliation will take place on an as-needed basis. The intention is to identify anomalies and exceptions scenarios as early as possible, in an effort to respond quickly and minimize the impact of issues.

There won’t be an audit file as audit files are not defined by the A.12 standards body and are not part of the TR3 5010 820 specifications.

DC Exchange will set up a standard operating procedure to address resolution of issues through the reconciliation process.

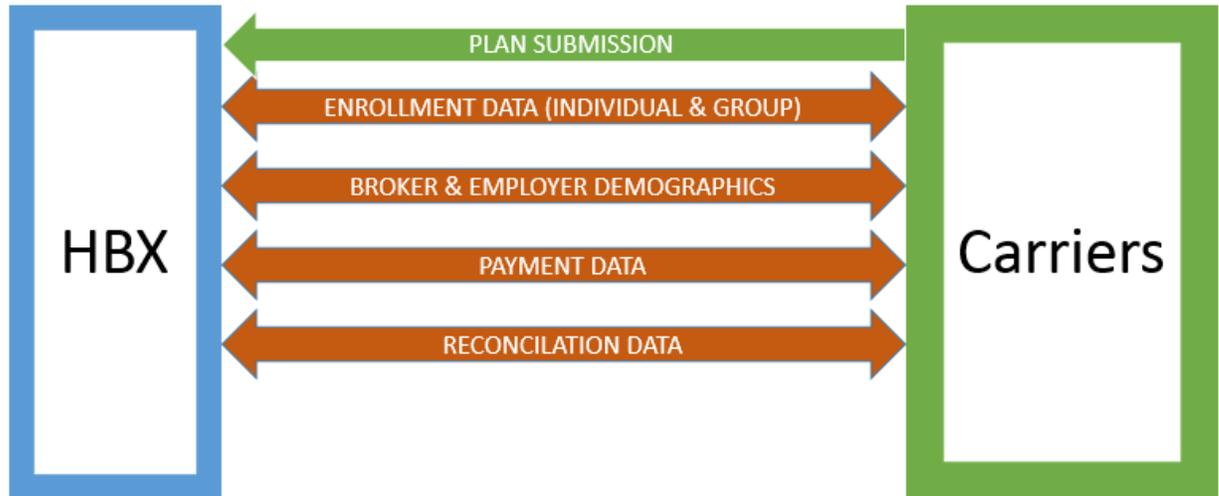
#### 4.6 EMPLOYER , GROUP AND BROKER DATA

It is important for the Carrier to receive and load the employer/group enrollment data before enrollee data enrollment is loaded via the 834 file. Employer/Group information is sent from the DC Exchange to the Carrier using web services in real time or through a batch file interface. If using the batch file interface, the files will be made available to the Carrier on a daily basis. The Carrier should retrieve and load all Employer/Group enrollment files before processing any 834 files from the DC Exchange.

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## 5.0 HIGH-LEVEL INTEGRATION

### 5.1 Batch Interaction



DC Exchange will set up a standard SSH File Transfer Protocol (SFTP) server for Batch transfers.

Each Carrier will login to DC Exchange file transfer server using their entity account. Each Carrier can see four standard folders in the SFTP server for the file exchange.

Folder	Source	Destination	Description
Inbox	DC Exchange	Carrier	Inbound files from DC Exchange to the Carrier
Outbox	Carrier	DC Exchange	Outbound files from Carrier to DC Exchange
InboxArchive	DC Exchange	Carrier	Archive of inbound files sent from DC Exchange to the Carrier
OutboxArchive	Carrier	DC Exchange	Archive of outbound files sent from DC Exchange to the Carrier

#### 5.1.1 DC Exchange - Carrier Sequence - INBOUND

Below is the sequence of activities for an inbound file transfer from DC Exchange to Carrier. All inbound files to Carriers are encrypted and are available for the Carriers to retrieve from their corresponding INBOX folders.

1. Carrier authenticates self and establishes a secure connection with DC Exchange.
2. Carrier downloads the inbound file from INBOX folder. - Download activity can be manual or a system interaction.
  - a. Carrier processes the inbound file.
  - b. DC Exchange moves the file to the Inbox Archive folder after Carrier successfully downloads it.
3. Carrier sends Acknowledgement/Error file after processing the inbound file to OUTBOX folder.

### 5.1.2 DC Exchange - Carrier Sequence - OUTBOUND

Below is the sequence of activities for an outbound file transfer from DC Exchange to Carrier. All outbound files from Carrier are Encrypted and are available for DC Exchange in the corresponding OUTBOX folder to process

1. Carrier authenticates self with DC Exchange and establishes a secure connection
2. Carrier pushes Encrypted outbound file to OUTBOX folder on DC Exchange SFTP server.
  - a. DC Exchange takes a copy of the file for downstream processing.
  - b. DC Exchange moves the file to the OUTBOX Archive folder.
3. DC Exchange sends Acknowledgement/Error file to Carrier's INBOX folder.
4. Carrier retrieves the acknowledgement/error file.

### 5.1.3 Security

DC Exchange is working on security details and will provide them in later versions of this document.

### 5.1.4 Error Handling

DC Exchange is working on error handling and details will be provided in later versions of this document.

## 5.2 Real Time Interaction

DC Exchange is working on real time interaction design and details will be provided in later versions of this document.

## 6.0 INTEGRATION TRANSACTIONS

This section provides design details of different integration transaction points between DC Exchange and Carriers.

### 6.1 BATCH INTEGRATION

#### 6.1.1 DC Exchange - Carrier (Batch)

Transaction	Data Exchanged	Sender	Receiver	Frequency
Send QHP data to DC Exchange	DC Exchange QHP data	Carrier	DC Exchange	As Needed
Get Decertify QHP Data from DC Exchange	DC Exchange Decertified QHP data	DC Exchange	Carrier	As Needed
Get Enrollment data from DC Exchange	<ul style="list-style-type: none"> <li>Employee/Individual: New Enrollment/ Changes/ Termination</li> <li>Dependents: New Enrollment/ Changes/ Termination</li> </ul>	DC Exchange	Carrier	Daily
Send Enrollment data to DC Exchange	<ul style="list-style-type: none"> <li>Employee/Individual: New Enrollment/ Changes/ Termination/Reinstatement</li> <li>Dependents: New Enrollment/ Changes/ Termination/Reinstatement</li> </ul>	Carrier	DC Exchange	Daily
Send Premium Payment to DC Exchange	Premium remittance advice	Carrier	DC Exchange	Daily
Get Premium Payment from DC Exchange	Premium remittance advice	DC HBX	Carrier	Daily
Send Enrollment Data for Reconciliation to DC Exchange	Employer Demographic Data <ul style="list-style-type: none"> <li>Employee/Individual: New Enrollment/Changes/ Termination Data</li> <li>Dependent: New Enrollment/Changes/ Termination Data</li> </ul>	Carrier	DC Exchange	Weekly/Monthly

#### 6.1.2 Send QHP Data to DC Exchange

<b>Description</b>	Send QHP data to DC Exchange from the Carrier.
<b>Interaction model</b>	DC Exchange will provide a portal for carriers to upload documents. The login details will be provided to carriers through email.
<b>Frequency</b>	As needed

### 6.1.3 Get Decertify QHP Data from DC Exchange

<b>Description</b>	Get Decertify QHP Data from DC Exchange transaction provides decertified QHP data from DC Exchange to the Carrier. It includes deletions to the QHP that are certified by DC Exchange earlier. Plans are decertified by DC Exchange.
<b>Interaction model</b>	Email or audit event to the Carrier.
<b>Frequency</b>	As needed

### 6.1.4 Get Enrollment data from DC Exchange

<b>Description</b>	Get Enrollment data from DC Exchange transaction addresses all possible enrollment scenarios for "Reinstate", "Update" or "Terminate" of the employee, individual and dependents from DC Exchange to carrier. It is listed in detail as below. <ul style="list-style-type: none"> <li>• Add an Employee/Individual</li> <li>• Reinstate an Employee/Individual</li> <li>• Update an existing Employee/Individual</li> <li>• Terminate an existing Employee/Individual</li> <li>• Reinstate a dependent.</li> <li>• Update an existing dependent</li> <li>• Terminate a existing dependent</li> </ul>
<b>Interaction model</b>	Batch
<b>File Name</b>	Will be finalized by June 15
<b>Archived File Name</b>	Will be finalized by June 15
<b>Frequency</b>	Daily
<b>Inbound File Format</b>	EDI X12 TA1 -Interchange Acknowledgement (005010231A1)
<b>Outbound File Format</b>	EDI X12 834 - Benefit Enrollment & Maintenance (005010220A1) as Format per the companion guide published by DC Exchange. <Note: DC Exchange 834 companion guide to be published>
<b>Exchange Process</b>	DC Exchange compiles all enrollment related data corresponding to the Carrier into an EDI X12 834 file format. Data is also customized per the DC Exchange published 834 Companion Guide.
<b>Success</b>	Carrier sends TA1 to DC Exchange as an initial acknowledgement after no errors are found at the interchange level.

### 6.1.5 Send Enrollment data to DC Exchange

<b>Description</b>	Get Enrollment data to DC Exchange transaction addresses all possible enrollment scenarios for "Reinstate", "Update" or "Terminate" of the employee, individual and dependents from Carrier to DC Exchange. It is listed in detail as below. <ul style="list-style-type: none"> <li>• Reinstate an Employee/Individual</li> <li>• Update an existing Employee/Individual</li> <li>• Terminate an existing Employee/Individual</li> </ul>
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	<ul style="list-style-type: none"> <li>• Reinstatement a dependent.</li> <li>• Update an existing dependent</li> <li>• Terminate an existing dependent</li> </ul>
<b>Interaction model</b>	Batch
<b>File Name</b>	Will be finalized by June 15
<b>Archived File Name</b>	Will be finalized by June 15
<b>Frequency</b>	Daily
<b>Inbound File Format</b>	EDI X12 TA1 -Interchange Acknowledgement (005010231A1)
<b>Outbound File Format</b>	EDI X12 834 - Benefit Enrollment & Maintenance (005010220A1) as Format per the companion guide published by DC Exchange. <Note: DC Exchange 834 companion guide to be published>
<b>Exchange Process</b>	Carrier must send single 834 for each Group/Employer. Carrier must follow the companion guide for 834 published by DC Exchange. Files to the DC HBX server need to be encrypted by the Carrier before uploading the files to the SFT server.
<b>Success</b>	DC Exchange sends TA1 to DC HBX as an initial acknowledgement after no errors are found at interchange level.

#### 6.1.6 Send Premium Payment to DC Exchange

<b>Description</b>	Send Premium Payment to DC Exchange provides premium payment information to DC Exchange.
<b>Interaction model</b>	Batch
<b>File Name</b>	Will be finalized by June 15
<b>Archive File Name</b>	Will be finalized by June 15
<b>Frequency</b>	Dependent on the frequency of payments to be made by Exchange.
<b>Inbound File Format</b>	<i>EDI X12 TA1 –Interchange Acknowledgement (005010231A1)</i>
<b>Outbound File Format</b>	<ul style="list-style-type: none"> <li>• <i>EDI X12 820 – Benefit Enrollment &amp; Maintenance (005010X306) as per the companion guide published by DC Exchange. &lt;Note: DC Exchange 820 companion guide to be published&gt;</i></li> </ul>
<b>Exchange Process</b>	<ul style="list-style-type: none"> <li>• Carrier must send 820 file to DC Exchange if the Carrier is collecting the premium from individuals for reporting in DC Exchange.</li> <li>• Carrier must follow the companion guide for 820 published by DC Exchange.</li> <li>• Files to the DC Exchange server need to be encrypted by the Carrier before uploading the files to the SFTP server.</li> </ul>
<b>Success</b>	DC Exchange sends TA1 to Carrier as an initial acknowledgement after no errors found at interchange level.

### 6.1.7 Get Premium Payment from DC Exchange

<b>Description</b>	Get Premium Payment from DC Exchange provides premium payment information to Carrier.
<b>Interaction model</b>	Batch
<b>File Name</b>	Will be finalized by June 15
<b>Archive File Name</b>	Will be finalized by June 15
<b>Frequency</b>	Will be finalized after discussions with carriers
<b>Inbound File Format</b>	<ul style="list-style-type: none"> <li>• <i>EDI X12 820 – Benefit Enrollment &amp; Maintenance (005010X306) as per the companion guide published by DC Exchange. &lt;Note: DC Exchange 820 companion guide to be published&gt;</i></li> </ul>
<b>Outbound File Format</b>	<i>EDI X12 TA1 –Interchange Acknowledgement (005010231A1)</i>
<b>Exchange Process</b>	<ul style="list-style-type: none"> <li>• <i>DC HBX will send 820 file to Carrier if the DC Exchange is collecting the premium from individuals and Employer/Group.</i></li> <li>• <i>DC HBX will follow the 820 companion guide published by DC Exchange.</i></li> </ul>
<b>Success</b>	<i>Carrier sends TA1 to DC HBX as an initial acknowledgement after no errors found at interchange level.</i>

### 6.1.8 Send Enrollment Data for Reconciliation to DC Exchange

<b>Description</b>	Send Enrollment Data for Reconciliation to DC Exchange transaction addresses the reconciliation between the Carrier and DC Exchange.
<b>Interaction model</b>	Batch
<b>File Name</b>	Will be finalized by June 15
<b>Archive File Name</b>	Will be finalized by June 15
<b>Frequency</b>	Weekly/Monthly
<b>Inbound File Format</b>	<i>EDI X12 TA1 –Interchange Acknowledgement (005010231A1)</i>
<b>Outbound File Format</b>	<ul style="list-style-type: none"> <li>• <i>EDI X12 834 – Benefit Enrollment &amp; Maintenance (005010220A1) as per the companion guide published by DC Exchange.</i></li> <li>• <i>&lt;Note: DC Exchange 834 companion guide to be published&gt;</i></li> </ul>
<b>Exchange Process</b>	<ul style="list-style-type: none"> <li>• <i>Carrier must send single 834 full file for all the groups and individuals enrolled in that week.</i></li> <li>• <i>Carrier must follow the companion guide for 834 published by DC Exchange.</i></li> <li>• <i>DC Exchange will review the 834 file and DC Exchange will contact the Carrier for discrepancies.</i></li> </ul>
<b>Success</b>	<i>DC Exchange sends TA1 to Carrier as an initial acknowledgement after no errors found at interchange level.</i>

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## 6.2 REAL TIME INTEGRATION

DC Exchange is working on real time integration design and details will be provided in later versions of this document.

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## 7.0 Testing and technology certification

### 7.1 Certification Requirements

In order to interface with the production systems of DC Exchange, all interfaces must be tested and certified in a testing environment. The detailed testing requirements will be contained in the individual interface integration documents and companion guides.

### 7.2 Testing Process

The DC Exchange defines the testing process in the following high-level phases:

1. Test Planning and Preparation
2. Test Execution and Support
3. Test Validation and Technical Certification

#### 7.2.1 Test Planning and Preparation

During the planning phase, the DC Exchange and participating Carriers will identify resources to support the testing effort. The DC Exchange envisions the following type of high-level roles/responsibilities.

Role	Responsibility	Carrier Will Identify	DC HBX Will Identify
<b>Test Manager</b>	<p>The DC Exchange will provide a Test Manager. The Test Manager will be the primary point of contact throughout the testing effort. The Test Manager will coordinate and oversee the entire testing effort. Responsibilities include:</p> <ul style="list-style-type: none"> <li>• Coordination of the test schedule.</li> <li>• Organizing and facilitation of conference calls and meetings.</li> <li>• Management of issues, risks, action items.</li> <li>• Management of the defect resolution process, coordinating the review, remedy, and disposition, of defects and/or anomalies.</li> <li>• Management and assurance of timely reporting of the overall test effort</li> <li>• Facilitation of the definition and acceptance of go/no-go criteria.</li> <li>• Facilitation of final technical validation as part of overall certification.</li> </ul>		X
<b>Test Specialist</b>	<p>Both the DC Exchange and participating Carriers will provide Test Specialists. The Test Specialists will collaborate to:</p> <ul style="list-style-type: none"> <li>• Develop scenarios and test use cases</li> <li>• Execute test plan</li> <li>• Identify and document defects and anomalies</li> <li>• Perform retesting and regression testing as appropriate</li> </ul>	X	X

	<ul style="list-style-type: none"> <li>• Validate reporting functions with DC Exchange based on reporting requirements</li> <li>• Contribute to status and management reporting on the overall test effort</li> </ul>		
<b>Developer</b>	<p>Both the DC Exchange and the participating Carriers will make available technical development staff to support the testing effort.</p> <p>Through Test Planning and Preparation, the specific roles and responsibilities for the DC Exchange development staff and the participating Carrier development staff will be elaborated and more clearly defined.</p> <p>At a high level, the DC Exchange developers and participating Carrier developers are responsible for researching and resolving defects and/or anomalies, as appropriate.</p> <p>Developers are also responsible for managing testing environments, technical access and security, and applicable interface support.</p>	X	X

The Test Manager will support the participating Carriers in understanding of the testing process by creating a framework for collaborative development of:

1. Testing Roadmap
  - a. The Roadmap is a simple document outlining the various steps, and the testing timeline that the Carrier Test Specialist will need to follow to self-test their changes in DC Exchange with the DC Exchange Test Specialist.
2. Testing Roles and Responsibilities
  - a. In greater detail, the roles/responsibilities will be defined and shared between DC Exchange and the Carrier.
  - b. The Test Manager will communicate the expectations for turnaround time for the items on the Roadmap.
3. Test Cases and/or Scenarios
  - a. The DC Exchange will provide a guide on how to develop test cases and scenarios that map back to the approved requirements.
  - b. Test case scripting will be a collaborative effort between the DC Exchange and the participating Carriers.
4. Defect Reporting Process
  - a. Applicable access to tools and/or forms for documenting defects will be provided.
  - b. Detailed guidelines regarding how to report and disposition defects.
5. Validation and Technical Certification
  - a. The DC Exchange will provide detailed information regarding test entrance / exit criteria, pass / fail criteria, and how to meet the overall technical requirements necessary for review and certification.

### 7.2.2 Test Execution Process and Support

During the Testing phase itself, the DC Exchange will provide a testing environment for the participating Carriers to submit and validate various testing scenarios. It is during the execution phase that the Test Manager will coordinate testing sessions with each of the participating Carriers to schedule send/receive/response testing time in order to validate that the interfaces are functioning according to approved requirements. The Test Manager will work in concert with the Carriers to create an overall schedule, facilitate co-located and remote testing as appropriate, and manage the defect report/resolution process.

Test Specialists will execute the test scenarios and report findings. Defects and/or anomalies will be researched, documented, aligned with requirements, resolved if appropriate or deferred to a future release. Technical staff will participate in the research and resolution process. Test Specialists will perform retesting and disposition of the defect and/or anomaly, as applicable.

### 7.2.3 Test Validation and Technical Certification

As part of the overall process to be certified in their selected Program, the participating Carriers will be required to validate their technical solutions with the DC Exchange.

The Test Manager will work with each participating Carrier to schedule time for the Carrier and the DC Exchange to conduct the necessary tests, reviews, and evaluation for technical certification. During this time, all required scenarios will be validated and findings documented. Upon successful completion of this process, and following a separate review of the applicable business requirements necessary to perform the selected Program, the Carrier will be granted official certification from the DC Exchange for the interfaces that have been tested.